GLOBAL REPORTING INITIATIVE INDEX

BIRLA CARBON 2018





GRI INDEX

BIRLA CARBON 2018

This report has been prepared in accordance with the GRI Standards at the Comprehensive level.

The data in this report relates to the fiscal year ending March 31, 2018, unless otherwise stated. For a detailed explanation of the indicators, visit the GRI website.

Mapping our material GRI indicators against the United Nations Sustainable Development Goals

We have mapped our existing progress against our most material aspects and indicators against the United Nations (UN) Sustainable Development Goals (SDGs), through the Compass tool developed by the UN.

The following key shows the icons we use in our GRI Index wherever it maps with an SDG:



GLOBAL REPORTING INITIATIVE (GRI) INDEX IN ACCORDANCE WITH COMPREHENSIVE GRI STANDARDS

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
102-1		Birla Carbon	
102-2	The social value of carbon black	Carbon black manufacturer and supplier. Our product has not been banned in any markets.	
102-3	Mumbai, Maharashtra, India		
102-4	http://birlacarbon.com/locations/	11 countries (Brazil, Canada, China, Egypt, Hungary, India, Italy, South Korea, Spain, Thailand, and United States of America)	
102-5	Governance	Aditya Birla Group	
102-6		Markets served are in Europe and Africa, North America, South America, Oceania, South East Asia and Far East.	
		Sector served: private, manufactured goods.	
		Customers are in the tire, manufactured rubber goods and speciality product industries (plastics, inks, paints and coatings).	
102-7		Total Number of Employees = 2,482	
		16 Manufacturing Sites	
		9 Offices	
		2 Technology Centers	
		Privately owned company	
		Production capacity of 2Mt/year	
		Selling price depends somewhat on oil price	
102-8	See Appendix: data GRI 102-8	A significant portion of the workforce at our plants in South Asia consists of contractors; these contractors perform work primarily in warehousing, maintenance and construction functions at the plants.	
		No significant variations in employee numbers reported throughout reporting period.	
		Data compiled by HR heads at each site at the end of FY2018. No significant assumptions were made when compiling data.	
		8	

DISCLOSURE			
NUMBER	SOURCE	NOTES	OMISSIONS
102-9	Supplier management	Our main suppliers consist of raw material and chemical providers, engineering groups for equipment and spare parts, and transportation companies. Apart from feedstock oil, most of our suppliers are managed regionally and even locally, at the plant level.	
102-10		Opening of greenfield plant in Jining, China.	
		No significant changes in the share capital structure or in the location of suppliers or relationships with suppliers.	
102-11	Responsible stewardship		
	Future-proofing		
	Governance		
	Product responsibility		
102-12	Our approach	17	
	Stakeholder engagement		
	Future-proofing		
	Governance		
	Compliance Product responsibility		
	The big questions		
	Product quality		
	Carbon stewardship		
	Water		
	<u>Customer engagement</u>		
	Employee engagement		
102-13	Stakeholder engagement	International Carbon Black Association (ICBA)	
		World Business Council for Sustainable Development (WBCSD)	
		Brazilian Chemical Industry Association (ABIQUIM)	
		Consorcio Español del Caucho (Spanish Rubber Industry Consortium)	
		Risk Management Society (RIMS)	
		North American Product Safety and Regulatory Committee (NAPSRC)	
		Sustainability Leadership Forum (SLF)	
		17	

DISCLOSURE			
NUMBER	SOURCE	NOTES	OMISSIONS
102-14	Leadership messages		
102-15	Leadership messages Focusing on what matters Sustainable Development Goals Responsible stewardship Stakeholder engagement Future-proofing Targets and progress About our report		
102-16	Ethics Compliance	16	
102-17	Ethics Compliance	16	
102-18	Governance	16	
102-19	Governance		
102-20	Focusing on what matters Governance		
102-21	Stakeholder engagement Governance Customer engagement Employee engagement	16 17	
102-22	http://birlacarbon.com/about/	Each member of Birla Carbon's Senior Management Team holds an executive position at Birla Carbon. Stakeholders, with the exception of shareholders, are not represented on the Senior Management Team currently. The selection process ensures that all candidates possess the necessary knowledge and expertise of economic, environmental and social issues pertinent to Birla Carbon. If conflicts of interest arise, these will be self-declared by the members.	
102-23	http://birlacarbon.com/about/dr-santrupt-misra/	16	
			2017

	,		
DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
102-24		The process for selecting the officers of the SMT involves working with top search firms to select the most qualified candidates based upon their experience and qualifications. While gender and diversity are important considerations, the selection process ensures that all candidates possess the necessary knowledge and expertise of economic, environmental and social issues pertinent to Birla Carbon. If conflicts of interest arise, these will be self-declared by the members. Stakeholders, with the exception of shareholders, are not consulted during the selection process. For each Birla Carbon entity, the shareholders appoint/reappoint the members of that company's Board of Directors by either an Annual Shareholders Meeting or a Written Consent in lieu of an Annual Shareholders Meeting (as required by the respective country's corporate laws).	
102-25	Downloads (see Birla Carbon Code of Conduct)	All employees, including those in the highest governing body, are required to sign a Code of Conduct that includes the following language: "Each Employee must avoid at all times any interest that might conflict or appear to conflict with the interests of the Company, or that might deprive the Company of the undivided loyalty of the Employee in business dealings. To this end, an Employee should not become involved in any situation that may create a personal interest in the situation, or place the Employee under an obligation that may interfere with his or her primary duty to serve the Company at all times to the best of his or her ability." Also, each member of the SMT is required to participate in ethics and code of conduct training to assist in identification and handling of conflicts of interest. In the rare event that a potential conflict of interest arises within the SMT, members are required to self-declare the conflict, and are then excused from related discussions.	
102-26	Governance		
102-27	Governance	Specific teams within the business responsible for sustainability-related programs will also provide progress updates direct to the SMT.	
			CONTINUED ▶

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
102-28		Birla Carbon's SMT is evaluated based on the success of the business linked to the 2030 sustainability targets, which cover economic, environmental and social performance.	
		Birla Carbon's Regional Presidents are also assessed on safety objectives for their region, which are linked to their remuneration scheme. These evaluations take place on an annual basis and will be reviewed by the Aditya Birla Group Chairman. No actions have been required in response to these evaluations in FY2018.	
102-29	Focusing on what matters Stakeholder engagement	16	
	Governance		
102-30	Governance		
102-31	Focusing on what matters Governance		
102-32		Chief Legal, Sustainability and Risk Officer, Joe Gaynor reviews and approves Birla Carbon's sustainability report.	
102-33	Ethics		
102-34	Ethics		
102-35		Annual compensation matters for all employees in Job Band 5 and above are linked to the annual incentive plan (AIP) and long-term incentive plans (LTIP), which the Chairman approves. These are tied directly to the business's approved annual operating plan and budget that establishes the relevant performance metrics executives will be measured against annually and the performance of the business during the year gone by, in addition to long-range business performance goals with a three year or longer measurement period. Each executive's personal performance is measured by a rigorous process of performance management throughout the year and linked, where relevant, to economic, environmental and social performance objectives. Compensation in this context includes, but is not limited to, cash or deferred payments, incentive and equity compensation, benefits, perquisites, employment, retention and/or termination/severance agreements and any other programs that would be considered compensation by regulatory authorities.	

GRI 102: GENERAL STANDARD DISCLOSURES 2016

DISCLOSUR			
NUMBER	SOURCE	NOTES	OMISSIONS
102-36		All compensation actions for employees in Job Band 5 and above are subject to the approval of the Chairman of the Aditya Birla Group, assisted by Group Human Resources and the office of the Chief Human Resources Officer (CHRO). The CHRO's office puts together the Compensation proposal for all employees in Job Band 3 and above that includes all the members of the SMT and presents it to the Chief Operating Officer (COO). The COO then forwards the proposals to the Chief Executive Officer (CEO) for his approval, which then is forwarded to the Group Human Resources department. Levels of remuneration are regularly benchmarked against similar positions in related industries through external resources. External benchmarking is conducted for each position in this group. A special sample from third party surveys is used, controlling for revenues of company and related industries. Positions are typically compared to median fixed and total compensation during the annual compensation review. Remuneration consultants used for this benchmarking have no other relationship with Birla Carbon.	
102-37		Birla Carbon does not consult external stakeholders, other than shareholders, on remuneration policies. 16	
102-38			Due to the size of some Birla Carbon business units and the number of employees, compensation data is classified as business sensitive and cannot be disclosed due to confidentiality constraints.
102-39			Due to the size of some Birla Carbon business units and the number of employees, compensation data is classed as business sensitive and cannot be disclosed due to confidentiality constraints.
102-40	Stakeholder engagement		
102-41	Ethics	8	
102-42	Stakeholder engagement		

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GRI 102: GENERAL STANDARD DISCLOSURES 2016

DISCLOSURE			
NUMBER	SOURCE	NOTES	OMISSIONS
102-43	Stakeholder engagement	17	
	Focusing on what matters		
	Governance		
	<u>Ethics</u>		
	Product responsibility		
	Product quality		
	<u>Carbon stewardship</u>		
	<u>Customer engagement</u>		
	<u>Supplier management</u>		
	Employee engagement		
	Community engagement		
102-44	See above		
102-45		Our consolidated financial statements include all manufacturing facilities and legal entities worldwide.	
102-46	Focusing on what matters		
	Future-proofing		
	About our report		
102-47	Focusing on what matters	Material aspects are those with indicators reported against in this index.	
102-48		Correction made to 302-1 and 305-2 for previously reported years.	
102-49	About our report		
102-50		FY2018, April 1 2017 to March 31 2018	
102-51		FY2017	
102-52		Annual	
102-53		Dr. Gilles Moninot, Global Sustainability Director	
		birlacarbon.sustainability@adityabirla.com	
102-54		This report has been prepared in accordance with the GRI Standards: Comprehensive option.	

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DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
102-55		GRI Standards are referenced throughout this index. Material topics that are reported on but not covered by the GRI standards include: Business continuity Global Presence Innovation Customer Engagement	
102-56		Where available we use recognized methodologies for measuring and presenting our performance data, and have stated where this is not the case. This includes adhering to the Global Reporting Initiative's guidelines where appropriate. While Birla Carbon has not had its sustainability report independently verified this year, our approach to assurance is reviewed annually. Our Senior Management Team must approve any decision to seek external assurance.	

DISCLOSURE			
NUMBER	SOURCE	NOTES	OMISSIONS
MATERIAL ISS	UE: GOVERNANCE FRAMEWORK		
GRI 103: Man	agement Approach 2016		
103-1	Leadership messages Focusing on what matters Sustainable Development Goals Stakeholder engagement Future-proofing		
	About our report		
103-2	Leadership messages Sustainable Development Goals Responsible stewardship Targets and progress Governance Compliance Downloads		
103-3	Responsible stewardship Targets and progress Stakeholder engagement Governance Compliance		
GRI 307: Envii	ronmental Compliance 2016		
307-1		Birla Carbon did not pay any environmental fines in FY2018.	
GRI 419: Socio	peconomic Compliance 2016		
419-1		Birla Carbon has not received any significant fines for noncompliance with laws and regulations concerning the provision and use of products and service in FY2018.	
			CONTINUED ▶

DISCLOSURE			
NUMBER	SOURCE	NOTES	OMISSIONS
MATERIAL ISSU	JE: ETHICS		
GRI 103: Mana	gement Approach 2016		
103-1	Leadership messages Focusing on what matters Sustainable Development Goals Stakeholder engagement Future-proofing About our report		
103-2	Leadership messages Sustainable Development Goals Responsible stewardship Targets and progress Governance Ethics Compliance Downloads		
103-3	Responsible stewardship Targets and progress Stakeholder engagement Governance Ethics Compliance		
GRI 205: Anti-	Corruption 2016		
205-1		100% of Birla Carbon's plants are analyzed for risk at least every two years by the internal audit department. If compliance issues are discovered, sites may be audited more frequently until findings are corrected. No significant risks related to corruption were identified through the risk assessments in FY2018.	
			CONTINUED

DISCLOSUR			
NUMBER	SOURCE	NOTES	OMISSIONS
205-2		Birla Carbon has communicated and provided training on its anti-corruption policies and procedures (Code of Ethics) to 100% of its employees, including governance body members and business partners as part of our standard Terms and Conditions.	
205-3	Ethics	There were no reported incidents of corruption or actions taken in FY2018.	
GRI 206: Ar	nti-Competitive Behavior 2016		
206-1		Birla Carbon has not been involved in any legal actions pending or completed during the reporting period regarding anti-competitive behavior, violations of antitrust, or monopoly legislation. 16	
MATERIAL I	SSUE: BUSINESS CONTINUITY		
GRI 103: M	anagement Approach 2016		
103-1	Leadership messages Focusing on what matters Sustainable Development Goals Stakeholder engagement Future-proofing About our report		
103-2	Leadership messages Sustainable Development Goals Responsible stewardship Targets and progress Governance Downloads		
	·		CONTINUED

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
103-3	Responsible stewardship		
	Targets and progress		
	Stakeholder engagement		
	Governance		
MATERIAL ISS	UE: PRODUCT STEWARDSHIP		
GRI 103: Man	agement Approach 2016		
103-1	Leadership messages		
	Focusing on what matters		
	Sustainable Development Goals		
	Stakeholder engagement		
	Future-proofing		
	About our report		
103-2	Leadership messages		
	Sustainable Development Goals		
	Responsible stewardship		
	Targets and progress		
	Governance		
	Product responsibility		
	The big questions		
	<u>Downloads</u>		
103-3	Responsible stewardship		
	Targets and progress		
	Stakeholder engagement		
	Governance		
	Product responsibility		
	The big questions		
GRI 416: Cust	omer Health and Safety 2016		
416-1		100% of products are assessed for health and safety	
		improvements. 3 8 9 16	
			CONTINUED ▶

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
416-2		There have been no incidents of noncompliance with regulations and voluntary codes concerning the health and safety impacts of Birla Carbon products in FY2018. 3 8 9 16	
MATERIAL ISS	UE: PRODUCT CONSISTENCY		
GRI 103: Man	agement Approach 2016		
103-1	Leadership messages Focusing on what matters Sustainable Development Goals Stakeholder engagement Future-proofing About our report		
103-2	Leadership messages Sustainable Development Goals Responsible stewardship Targets and progress Governance Product quality Downloads		
103-3	Responsible stewardship Targets and progress Stakeholder engagement Governance Product quality		
GRI 417: Mar	keting and Labeling 2016		
417-1		Through Safety Data Sheets (SDS) Birla Carbon's product labeling includes the content and safety guidance on use and disposal of the product. 3 8 9 16	
417-2		There have been no incidents of noncompliance with regulations and voluntary codes concerning product and service information and labeling in FY2018.	CONTINUED

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DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
417-3		There have been no incidents of noncompliance with regulations and voluntary codes concerning marketing communications in FY2018.	
MATERIAL ISS	SUE: INNOVATION		
GRI 103: Man	agement Approach 2016		
103-1	Leadership messages Focusing on what matters Sustainable Development Goals Stakeholder engagement Future-proofing About our report		
103-2	Leadership messages Sustainable Development Goals Responsible stewardship Targets and progress Governance Research and development Downloads		
103-3	Responsible stewardship Targets and progress Stakeholder engagement Governance Research and development		
			CONTINUED ▶

DISCLOSUR NUMBER	E SOURCE	NOTES	OMISSIONS
	SSUE: ENERGY		
GRI 103: Ma	anagement Approach 2016		
103-1	Leadership messages Focusing on what matters Sustainable Development Goals Stakeholder engagement Future-proofing		
103-2	About our report Leadership messages Sustainable Development Goals Responsible stewardship Targets and progress Governance Research and development Downloads		
103-3	Responsible stewardship Targets and progress Stakeholder engagement Governance Research and development		
GRI 302: En	ergy 2016		
302-1	See Appendix: data GRI 302-1	Birla Carbon's energy consumption has been provided in energy intensity values due to the commercial sensitivity of this information in actual values. Data has been corrected for previous three years. 7 12 13	
302-2	See Appendix: data GRI 302-2	7 12 13	
			CONTINUED

DISCLOSUR			
NUMBER	SOURCE	NOTES	OMISSIONS
302-3		Birla Carbon's energy consumption intensity in FY2018 was 11.91 GJ/tonne of Carbon Black. Our organization-specific metric is carbon black production. All types of energy consumed are included in the calculation. Only energy consumed within the organization is included in the ratio. 7 12 13	
302-4		Birla Carbon reduced its energy consumption intensity by 0.2 GJ/tonne of Carbon Black in FY2018 as compared to FY2017. All types of energy consumed are included in the calculation. 7 12 13	
302-5		7 9 12 13	Information unavailable. Birla Carbon is working to develop and produce new grades of carbon black that are easier to incorporate into customer manufacturing processes and products. While Birla Carbon's customers may measure the corresponding energy gain in their manufacturing processes, Birla Carbon has no access to this information due to the commercial sensitivity of the rubber, plastic or ink formulations. Each manufacturing process varies and it is outside of Birla Carbon's control to consider in a generic formulation all the factors that affect the energy measurement.
MATERIAL IS	SSUE: GHG AND AIR EMISSIONS		
GRI 103: M	anagement Approach 2016		
103-1	Leadership messages Focusing on what matters Sustainable Development Goals Stakeholder engagement		
	Future-proofing About our report		
	·		CONTINUED

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
103-2	Leadership messages		
	Sustainable Development Goals		
	Responsible stewardship		
	Targets and progress		
	Governance		
	<u>Life Cycle Assessments</u>		
	<u>Carbon stewardship</u>		
	<u>Air emissions</u>		
	<u>Downloads</u>		
103-3	Responsible stewardship		
	Targets and progress		
	Stakeholder engagement		
	Governance		
	<u>Life Cycle Assessments</u>		
	<u>Carbon stewardship</u>		
	<u>Air emissions</u>		
GRI 305: Emi	ssions 2016		
305-1	See Appendix: data GRI 305-1	3 12 13	
305-2	See Appendix: data GRI 305-2	3 12 13	
305-3	See Appendix: data GRI 305-3	Through our product Life Cycle Assessment, Birla Carbon has identified the energy consumption of suppliers and downstream transportation as material, based on where potential energy reductions could be undertaken or influenced by Birla Carbon. 3 12 13	
305-4	Targets and progress	3 12 13	Confidentiality constraints. Absolute emissions data is
	Carbon stewardship		commercially sensitive.

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
305-5	Targets and progress Carbon stewardship	 a) Although Birla Carbon experienced an overall increase in Scope 1 emissions due to increased production, emission reduction initiatives account for a decrease of approximately 4,800 metric tonnes of Scope 1 CO₂ emissions. The approximately 22,000 metric ton reduction in Scope 2 emissions from FY17 to FY18 is a result of ongoing energy conservation and efficiency measures undertaken by Birla Carbon. b) Only CO₂ gas is included in the calculation as emissions of other gases are considered negligible in comparison. c) Comparisons are made to the previous GRI reporting year (FY2017). d) Scope 1 and Scope 2 e) Same as reported in 305-1 and 305-2. 12 13 	Confidentiality constraints. Absolute emission intensity data is commercially sensitive.
305-6		3 13	Not applicable. Emissions of ozone-depleting substances are deemed immaterial to Birla Carbon due to the nature of its manufacturing processes and scale of its direct CO ₂ emissions.
305-7		3 13	Information unavailable. Emissions of NOx, SOx, and other significant air emissions are monitored on a continuous basis at some sites to ensure each manufacturing plant stays within the regulatory limits. However, the overall data is not collected globally. Collection processes for this data will be reviewed over the next 12 months.
MATERIAL ISS	UE: WATER		
GRI 103: Man	agement Approach 2016		
103-1	Leadership messages Focusing on what matters Sustainable Development Goals Stakeholder engagement Future-proofing		
	About our report		
			CONTINUED →

DISCLOSURE			
NUMBER	SOURCE	NOTES	OMISSIONS
103-2	<u>Leadership messages</u>		
	Sustainable Development Goals		
	Responsible stewardship		
	Targets and progress		
	Governance		
	Water		
	<u>Downloads</u>		
103-3	Responsible stewardship		
	Targets and progress		
	Stakeholder engagement		
	Governance		
	Water		
GRI 303: Wate	er 2016		
303-1	See Appendix: data GRI 303-1	6 12	
303-2		Birla Carbon complies with the relevant local regulations on water withdrawal for each of its manufacturing plants. Birla Carbon is not aware of any significant impacts to water bodies as a result of our water withdrawal practices.	
303-3	See Appendix: data GRI 303-3	6 12	
GRI 306: Efflu	ents and Waste 2016		
306-1	See Appendix: data GRI 306-1	3 6 12	
306-5		Birla Carbon is not aware of any water bodies or related habitats that are significantly affected by its operations but will review potential measurement processes to verify this over the next 12 months. 3 6 12	
			CONTINUED

DISCLOSURE	:		
NUMBER	SOURCE	NOTES	OMISSIONS
MATERIAL IS:	SUE: WASTE		
GRI 103: Ma	nagement Approach 2016		
103-1	<u>Leadership messages</u>		
	Focusing on what matters		
	Sustainable Development Goals		
	Stakeholder engagement		
	Future-proofing		
	About our report		
103-2	Leadership messages		
	Sustainable Development Goals		
	Responsible stewardship		
	Targets and progress		
	Governance		
	Water		
	Waste		
	Downloads		
103-3	Responsible stewardship		
	Targets and progress		
	Stakeholder engagement		
	Governance		
	Water		
	Waste		
GRI 306: Effl	uents and Waste 2016		
306-2	See Appendix: data GRI 306-2	Gypsum, a byproduct of flue gas desulfurization systems, is now included in the values reported in this indicator. Hence, the increase in the reported quantity of non-hazardous waste. Currently, generated gypsum is reused or recycled by a third-party vendor. 3 12	
			CONTINUED

DISCLOSURE			
NUMBER	SOURCE	NOTES	OMISSIONS
306-3	Targets and progress	Birla Carbon recorded 13 environmental releases in FY2018. Environmental releases may include authorized and unauthorized releases to air, soil and/or water. Where our plants are in close proximity to communities, we voluntarily report releases of carbon black, even if they are below regulatory reporting limits. In FY2018, we had two releases of carbon black/feedstock to soil and one to air exceeding regulatory reporting limits. The remaining releases were reported on a voluntary basis to regulatory authorities.	
306-4	See Appendix: data GRI 306-4	3 12	
MATERIAL ISS	SUE: CUSTOMER ENGAGEMENT		
GRI 103: Mar	nagement Approach 2016		
103-1	<u>Leadership messages</u>		
	Focusing on what matters		
	Sustainable Development Goals		
	Stakeholder engagement		
	Future-proofing		
	About our report		
103-2	<u>Leadership messages</u>		
	Sustainable Development Goals		
	Responsible stewardship		
	Targets and progress		
	Governance		
	<u>Customer engagement</u>		
	<u>Downloads</u>		
103-3	Responsible stewardship		
	Targets and progress		
	Stakeholder engagement		
	Governance		
	<u>Customer engagement</u>		

DISCLOSU	DE			
NUMBER	SOURCE	NOTES	OMISSIONS	
MATERIAL ISSUE: SUSTAINABLE PROCUREMENT				
GRI 103: N	lanagement Approach 2016			
103-1	<u>Leadership messages</u>			
	Focusing on what matters			
	Sustainable Development Goals			
	Stakeholder engagement			
	Future-proofing			
	About our report			
103-2	<u>Leadership messages</u>			
	Sustainable Development Goals			
	Responsible stewardship			
	Targets and progress			
	Governance			
	Supplier management			
	<u>Downloads</u>			
103-3	Responsible stewardship			
	Targets and progress			
	Stakeholder engagement			
	Governance			
	Supplier management			
GRI 204: P	rocurement Practices 2016			
204-1			Information unavailable. As Birla Carbon has a decentralized	
			procurement approach, local procurement data is not currently available. Birla Carbon recognizes this is a gap in	
			its procurement management and intends to develop the measurement tools to collect this data over the next 12 months.	
			measurement tools to collect this data over the next 12 months.	
GRI 414: Supplier Social Assessment 2016				
414-1	Ethics and compliance	Birla Carbon does not systematically conduct human rights		
	<u>Customer and suppliers</u>	screening of our suppliers. In 2016 we revised our Supplier Terms and Conditions to include a Business Ethics clause		
	Supplier management	refering to our Code of Ethics.		
		16 17		
			CONTINUED →	
			CONTINUED	

SPECIFIC STANDARD	DISCLOSURES

D1001 001:55			
DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
414-2	Ethics and compliance Customer and suppliers Supplier management	Birla Carbon does not systematically conduct impact assessments or human rights screening of our suppliers. However, in 2016 we revised our Supplier Terms and Conditions to include a Business Ethics clause referring to our Code of Ethics. 16 17	
GRI 301: Mat	erials 2016		
301-1	See Appendix: data GRI 301-1	12 13	
301-2	Our product	We are unable to use recycled feedstock oil due to its impact on product quality and the nature of our production process. 12 13	
301-3		We recycle as much as possible our off-spec material back into our manufacturing process. The amount of packing material (i.e., pallets, big bags) we use is limited, but we strive to recycle as much as possible. Through our partnership with Repasack® in Europe, we recycled 4.74 metric tonnes of packaging material.	
MATERIAL ISS	SUE: SAFETY		
GRI 103: Mar	nagement Approach 2016		
103-1	Leadership messages Focusing on what matters Sustainable Development Goals Stakeholder engagement Future-proofing About our report		
103-2	Leadership messages Sustainable Development Goals Responsible stewardship Targets and progress Governance Health and safety Downloads		

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
103-3	Responsible stewardship		
	Targets and progress		
	Stakeholder engagement		
	Governance		
	Health and safety		
GRI 403: Occ	cupational Health and Safety 2016		
403-1		100% of Birla Carbon employees are represented in formal joint management–worker health and safety committees that help monitor and advise on occupational health and safety programs. Each plant has a health and safety manager who oversees worker safety, while all employees are involved in direct health and safety discussions with their line managers and are responsible for health and safety decisions.	
403-2	See Appendix: data GRI 403-2	3 8	
403-3		Birla Carbon is not aware of any occupational activities within its operations that cause a high incidence or high risk of specific diseases. However, Birla Carbon monitors the research published by the ICBA on Occupational Diseases. 3 8	
403-4		12 of 16 Birla Carbon sites have formal agreements with trade unions that cover health and safety. On average, 100% of relevant health and safety topics are covered by these agreements.	
MATERIAL ISS	SUE: EMPLOYEE ENGAGEMENT		
GRI 103: Mai	nagement Approach 2016		
103-1	<u>Leadership messages</u>		
	Focusing on what matters		
	Sustainable Development Goals		
	Stakeholder engagement		
	Future-proofing		
	About our report		
			CONTINUED

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
103-2	Leadership messages	NOTES	OMISSIONS
103-2	Sustainable Development Goals		
	Responsible stewardship		
	Targets and progress		
	Governance		
	Attracting and retaining talent		
	Downloads		
103-3	Responsible stewardship		
	Targets and progress		
	Stakeholder engagement		
	Governance		
	Health and safety		
GRI 401: Emp	ployment 2016		
401-1	See Appendix: data GRI 401-1	8	
401-2		Benefits are provided to full-time, part-time and temporary employees in accordance with local laws and regulations. Birla Carbon endeavors to provide full- and part-time employees with the same level of benefits where appropriate.	
401-3	See Appendix: data GRI 401-3	8	
GRI 404: Trai	ning and Education 2016		
404-1	See Appendix: data GRI 404-1		
404-2	Attracting and retaining talent	8	
	Employee engagement		
404-3		100% of employees receive regular performance and career development reviews.	
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See our full report: <u>Sustainability Report 2018</u>

SPECIFIC STA	SPECIFIC STANDARD DISCLOSURES					
DISCLOSURE						
NUMBER	SOURCE	NOTES	OMISSIONS			
MATERIAL ISS	UE: HUMAN RIGHTS					
GRI 103: Man	agement Approach 2016					
103-1	Leadership messages					
	Focusing on what matters					
	Sustainable Development Goals					
	Stakeholder engagement					
	Future-proofing					
	About our report					
103-2	<u>Leadership messages</u>					
	Sustainable Development Goals					
	Responsible stewardship					
	Targets and progress					
	<u>Governance</u>					
	Ethics					
	Downloads					
103-3	Responsible stewardship					
	Targets and progress					
	<u>Stakeholder engagement</u>					
	<u>Governance</u>					
	Ethics					
GRI 406: Non	-Discrimination 2016					
406-1		There were no incidents of discrimination in FY2018.				
GRI 408: Chile	d Labor 206					
408-1		No operations or suppliers are considered as having significant risk for child labor. Birla Carbon's Code of Ethics and Supplier Terms and Conditions prohibit this.				
GRI 409: Ford	ed or Compulsory Labor 2016					
409-1		No operations or suppliers are considered as having significant risk for incidents of forced or compulsory labor. Birla Carbon's Code of Ethics and Supplier Terms and Conditions prohibit this. 8 10 16				

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See our full report: Sustainability Report 2018

SPECIFIC STA	ANDARD DISCLOSURES		
DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
GRI 411: Righ	ts of Indigenous Peoples 2016		
411-1		There were no incidents of violations involving rights of indigenous peoples in FY2018.	
GRI 412: Hum	an Rights Assessment 2016		
412-1		None of our operations have been subject to formal human rights reviews or impact assessments. 16	
412-2		Around 2,400 hours were spent training employees on human rights policies and procedures in FY2018. 100% of employees were trained on human rights policies and procedures in FY2018.	
412-3		Birla Carbon does not systematically include human rights clauses in investment agreements. In 2016, we revised our Supplier Terms and Conditions to include a Business Ethics clause refering to our Code of Ethics. 17	
MATERIAL ISS	UE: COMMUNITY ENGAGEMENT		
GRI 103: Man	agement Approach 2016		
103-1	Leadership messages Focusing on what matters Sustainable Development Goals Stakeholder engagement Future-proofing About our report		

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DISCLOSUR NUMBER	SOURCE	NOTES	OMISSIONS
103-2	Leadership messages		
	Sustainable Development Goals		
	Responsible stewardship		
	Targets and progress		
	Governance		
	Communities		
	Downloads		
103-3	Responsible stewardship		
	Targets and progress		
	Stakeholder engagement		
	Governance		
	Communities		
GRI 413: Lo	cal Communities 2016		
413-1		100% of Birla Carbon manufacturing plants have implemented local community engagement programs including local community development programs and formal local community grievance processes. While a number of Birla Carbon plants are testing ways to measure their community engagement programs, Birla Carbon recognizes this is inconsistent and intends to identify appropriate impact asssessment approaches over the next two years with the help of its parent company, the Aditya Birla Group.	
413-2		100% of Birla Carbon manufacturing plants would have significant potential negative impacts on local communities if carbon black powder is released in to the local area. However, Birla Carbon has strict controls in place to avoid these impacts from occurring.	
MATERIAL IS	SSUE: GLOBAL PRESENCE		
GRI 103: Ma	anagement Approach 2016		
103-1	<u>Leadership messages</u>		
	Focusing on what matters		
	Sustainable Development Goals		
	Stakeholder engagement		
	Future-proofing		
	About our report		
			CONTINUED

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
103-2	<u>Leadership messages</u>		
	Sustainable Development Goals		
	Responsible stewardship		
	Targets and progress		
	Governance		
	http://birlacarbon.com/about/#_global		
	<u>Downloads</u>		
103-3	Responsible stewardship		
	Targets and progress		
	Stakeholder engagement		
	Governance		
	http://birlacarbon.com/about/#_global		

APPENDIX: DATA

GRI 102-8 INFORMATION ON EMPLOYEES AND OTHER WORKERS

EMPLOYEE NUMBERS FY2018	SOL AME		SOL AS		SOUTH E	AST ASIA R EAST	NOI AME		EUROP AFR	E AND ICA	TOTAL MALE	TOTAL FEMALE	TOTAL
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female			
Full-time	210	24	548	22	468	139	353	75	560	74	2139	334	2473
Part-time	0	0	1	0	0	0	0	0	1	1	2	1	3
Permanent employees (full-time + part-time)	210	24	549	22	468	139	353	75	561	75	2141	335	2476
Temporary	0	0	3	0	0	0	2	0	1	0	6	0	6
Contractors/supervised	10	1	896	48	205	36	1	0	41	4	1153	89	1242

GRI 301-1 MATERIALS USED BY WEIGHT OR VOLUME

RAW MATERIALS USED	UNIT	FY2017	FY2018
Natural gas	kNm³	125,489	143,612
Oil feedstock	tonnes	2,451,843	2,581,289

Note: Raw materials are non-renewable and sourced from external suppliers. The data is calculated through direct measurement.

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APPENDIX: DATA

GRI 302-1 ENERGY CONSUMPTION WITHIN THE ORGANIZATION

ENERGY CONSUMPTION INTENSITY	UNIT	FY2016	FY2017	FY2018
Oil (non-production)	GJ/t _{carbon} black	0.10	0.09	0.09
Natural gas (non-production)	GJ/t _{carbon} black	0.88	0.65	0.58
Electricity consumption	GJ/t _{carbon} black	1.67	1.65	1.69
Steam consumption	GJ/t _{carbon} black	5.38	5.06	4.94
Tail gas consumption	GJ/t _{carbon} black	4.62	4.63	4.59
Compressed air consumption	GJ/t _{carbon} black	0.01	0.01	0.01
Hot water consumption	GJ/t _{carbon} black	0.01	0.02	0.01
Electricity sold	GJ/t _{carbon} black	1.01	1.17	1.27
Tail gas sold	GJ/t _{carbon} black	1.78	2.10	2.14
Steam sold	GJ/t _{carbon} black	3.02	3.03	3.07
Hot water sold	GJ/t _{carbon} black	0.31	0.13	0.00
Net energy use	GJ/t _{carbon} black	6.55	5.67	5.43
Total energy consumption	GJ/t _{carbon black}	12.67	12.11	11.91

Notes:

Site-specific gross calorifc value (GCV) used for fuels.

Used conversion factor of 278 to convert from kWh to GJ.

Consumption determined through direct measurements and utility bills.

GRI 302-2 ENERGY CONSUMPTION INTENSITY OUTSIDE THE ORGANIZATION

ENERGY CONSUMPTION INTENSITY	UNIT	FY2016	FY2017	FY2018
Upstream: Extraction, transport, refining and distribution of raw materials	GJ/tonne _{carbon} black	Not available	15.10	Not available
Downstream: Transportation and distribution of products	GJ/tonne _{carbon} black	Not available	1.50	Not available

Note: Scope 3 emissions were determined as part of a Life Cycle Assessment (LCA). Data required for the LCA was obtained directly from Birla Carbon's manufacturing plants, ecoinvent (v3), and the Greenhouse Gas, Regulated Emissions and Energy Use Transportation (GREET) Model (2013).

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APPENDIX: DATA

GRI 303-1 WATER WITHDRAWAL BY SOURCE

WATER WITHDRAWAL BY SOURCE	UNIT	FY2016	FY2017	FY2018
Surface water	m ³	7,116,414	7,329,432	7,546,224
Ground water	m ³	4,950,663	4,956,247	5,068,039
Rainwater and water recycled from other plant operations	m ³	3,299,460	3,652,108	3,813,241
Wastewater from other organizations	m ³	0	0	0
Municipal water supplies	m ³	4,496,812	3,633,199	4,407,653

Note: Surface water, ground water and municipal water volumes are directly measured via metering. Rainwater and water recycled from other plant operations are directly measured via metering at some locations and are estimated at others based on rainfall data for the area.

GRI 303-3 WATER RECYCLED AND REUSED

WATER RECYCLED AND REUSED	UNIT	FY2016	FY2017	FY2018
Total volume	m ³	3,299,460	3,652,108	3,813,241
Total volume as a percentage	%	17%	19%	18%

Note: Rainwater and water recycled from other plant operations are directly measured via metering at some locations and are estimated at others based on rainfall data for the area.

GRI 305-1 DIRECT (SCOPE 1) GHG EMISSIONS

DIRECT (SCOPE 1) GHG EMISSIONS	UNIT	FY2016	FY2017	FY2018
a. Direct GHG Emissions (Scope 1)	t _{CO2} -eq	3,229,498	3,307,831	3,624,311

Notes:

- b.Only CO₂ gas is included in the calculation as emissions of other gases are considered negligible in comparison.
- c. No biogenic CO₂ emissions.
- d.FY2005 is taken as the baseline year because this is the first year reliable direct GHG emission data was available for all plants. Base year Scope 1 emissions were 3,523,847 tonnes of CO₂eq.
- e. Emission factors for all facilities are sourced from 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Default Emission Factors for Stationary Combustion in Manufacturing Industries and Construction.
- f. Consolidation approach for emissions is based on operational control.
- g. Process Scope 1 emissions are calculated using a mass balance methodology. Stationary combustion emissions are calculated through Enablon.

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APPENDIX: DATA

GRI 305-2 ENERGY INDIRECT (SCOPE 2) GHG EMISSIONS

ENERGY INDIRECT GHG EMISSIONS (SCOPE 2)	UNIT	FY2016	FY2017	FY2018
a. Indirect GHG Emissions (Scope 2)	t _{CO2} -eq	93,551	106,297	84,355

Notes:

- b.Market-based energy indirect GHG emissions not applicable.
- c. Only CO₂ gas is included in the calculation as emissions of other gases are considered negligible in comparison.
- d. Base year emissions not applicable for absolute Scope 2 emissions.
- e. Emission factors for purchased electricity are sourced from Emission Factors from Cross-Sector Tools Electricity Other Countries Aug 2012 with the exception of sites in the US which are sourced from eGRID subregion emissions. Emission factors for purchased steam, compressed air and hot water are sourced from ELCD based on fuel types as shown below.
- f. Consolidation approach for emissions is based on operational control.
- g. Scope 2 emissions are calculated through Enablon.

EMISSION FACTORS BY REGION (MT CO ₂ e/GJ)	NORTH A	MERICA	SOUTH AMERICA	EUROPE AND AFRICA		SOUTH EAST ASIA AND FAR EAST		SOUTH ASIA				
Description	United States	Canada	Brazil	Italy	Hungary	Spain	Germany	Egypt	Korea	China	Thailand	India
Steam	0.07	0.07	0.11	0.07	0.07	0.07	0.07	0.07	0.11	0.11	0.11	0.11
Compressed air					0.07	0.07						
Hot water						0.07						
District water heating							0.07					

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APPENDIX: DATA

EF FOR FUEL COMBUSTION FROM EUROPEAN LIFE CYCLE DATABASE (ELCD)	LCA EF			
Туре	(t _{CO2-eq} /MWhe)	(t _{CO2-eq} /GJ)		
Motor gasoline	0.299	0.08		
Gas oil, diesel	0.305	0.08		
Residual fuel oil	0.31	0.09		
Anthracite	0.393	0.11		
Other bituminous coal	0.38	0.11		
Sub-bituminous coal	0.385	0.11		
Lignite	0.375	0.10		
Natural gas	0.237	0.07		
Municipal wastes (non-biomass)	0.33	0.09		
Wood	0.405	0.11		

GRI 305-3 OTHER INDIRECT (SCOPE 3) GHG EMISSIONS

OTHER INDIRECT GHG EMISSIONS (SCOPE 3)	UNIT	FY2016	FY2017	FY2018
a. Gross other indirect Scope 3 GHG emissions	t _{CO2} -eq	Not available	1,184,211	Not available

Notes:

- b.Only CO₂ gas is included in the calculation as emissions of other gases are considered negligible in comparison.
- c. No biogenic CO₂ emissions.
- d.The calculation includes the upstream extraction, transport, refining and distribution of feedstock materials and the downstream distribution to customers.
- e. FY2013 is taken as the baseline year because comprehensive and reliable energy data was not available for all plants in previous years. Base year Scope 3 emissions were 1,248,575 tonnes of CO₂eq.
- f. Scope 3 emissions were determined as part of a Life Cycle Assessment (LCA). Data required for the LCA was obtained directly from Birla Carbon's manufacturing plants, ecoinvent (v3), and the Greenhouse Gas, Regulated Emissions and Energy Use Transportation (GREET) Model (2013), The impact assessment method used to quantify the global warming potential (GWP) impact was IPCC 2007 GWP 100a V1.0Ž.

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APPENDIX: DATA

GRI 306-1 WATER DISCHARGE BY QUALITY AND DESTINATION

TOTAL WATER DISCHARGE BY QUALITY AND DESTINATION	UNIT	FY2016	FY2017	FY2018
Sanitary wastewater discharge	m ³	140,838	142,712	112,236
Industrial wastewater discharge to on-site collection pond	m ³	930,074	877,418	1,145,687
Industrial wastewater discharge to natural body of water	m ³	2,969,995	2,844,705	2,807,956
Industrial wastewater discharge to municipal wastewater treatment plant	m ³	321,317	328,568	345,419

Notes: The water treatment method varies between plants but typically includes settling and often times neutralization, pH control, flocculation, clarifying and dechlorination as needed. Any water recycled is used by Birla Carbon.

GRI 306-2 WASTE BY TYPE AND DISPOSAL METHOD

WEIGHT OF WASTE BY TYPE AND DISPOSAL METHOD ¹	UNIT	FY2016		FY2017		7 FY2018	
		HAZARDOUS	NON- HAZARDOUS ²	HAZARDOUS	NON- HAZARDOUS	HAZARDOUS	NON- HAZARDOUS
Reuse	tonnes	2	4	1	5	17	1,482
Recycling	tonnes	65	1,944	73	2,240	100	4,401
Composting	tonnes	0	0	0	0	0	0
Recovery, including energy recovery	tonnes	0	19	0	24	15	21
Deep well injection	tonnes	0	0	0	0	0	0
Landfill	tonnes	320	9,204	116	10,581	1,545	18,757
On-site storage	tonnes	0	0	0	0	14	NM
Incineration (mass burn)	tonnes	104	122	113	107	91	611

Note:

- 1. The waste disposal method is determined by Birla Carbon except for landfill disposal, which is a default of the waste disposal contractor.
- 2. Correction made to non-hazardous landfill and recycling to include general trash/refuse.

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APPENDIX: DATA

GRI 306-4 TRANSPORT OF HAZARDOUS WASTE

WEIGHT OF WASTE TRANSPORTED, IMPORTED, EXPORTED OR TREATED WASTE DEEMED HAZARDOUS	UNIT	FY2016	FY2017	FY2018
Hazardous waste transported	tonnes	387	190	1,645
Hazardous waste imported	tonnes	0	0	0
Hazardous waste exported	tonnes	0	0	0
Hazardous waste treated	tonnes	64	113	91
Percentage of hazardous waste shipped internationally	%	0	0	0

GRI 401-1 NEW EMPLOYEE HIRES AND EMPLOYEE TURNOVER

EMPLOYEE HIRES AND EMPLOYEE TURNOVER (FY2018)	TOTAL HIRES	HIRE RATE	TOTAL TURNOVER	TURNOVER RATE
Age: under 30 years	17	2.0%	6	0.7%
Age: 30–50 years	40	4.7%	27	3.2%
Age: over 50 years	10	1.2%	13	1.5%
Europe and Africa	13	1.5%	12	1.4%
North America	22	2.6%	13	1.5%
South Asia	3	0.4%	9	1.1%
South East Asia and Far East	28	3.3%	11	1.3%
South America	1	0.1%	1	0.1%
Female	17	2.0%	10	1.2%
Male	50	5.9%	36	4.2%

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APPENDIX: DATA

GRI 401-3 PARENTAL LEAVE

RETURN TO WORK AND RETENTION RATES AFTER PARENTAL LEAVE (FY2018)	FEMALE	MALE	TOTAL
Employees entitled to parental leave	298	1032	1330
Employees that took parental leave	16	48	64
Employees that returned to work	14	48	62
Employees in employment 12 months after returning to work	10	37	47
Return to work rate of those who took parental leave	88%	100%	97%
Retention rate of employees who took parental leave	63%	77%	73%

GRI 403-2 TYPES OF INJURY AND RATES OF INJURY, OCCUPATIONAL DISEASES, LOST DAYS, AND ABSENTEEISM, AND NUMBER OF WORK-RELATED FATALITIES

EMPLOYEE INJURY RATES	TYPE OF INJURY	TRIR	LOST TIME CASE	FATALITIES
Europe and Africa	Incidents related to slips and falls	0.87	0.87	0
North America	Incidents related to slips and falls, ergonomics and impacts (pinched, hit, dropped, etc.)	2	0.22	0
South Asia		0	0	0
South East Asia and Far East		0	0	0
South America		0	0	0

CONTRACTOR INJURY RATES	TYPE OF INJURY	TRIR	LOST TIME CASE	FATALITIES
Europe and Africa	Incidents related to falls, impacts (pinched, hit, dropped, etc.), and ergonomics	1.29	1.03	0
North America	Exposure (debris)	1.27	0	0
South Asia	Incidents related to impacts (pinched, hit, dropped, etc.) and falls	0.15	0	0
South East Asia and Far East	Incidents related to exposure (chemicals, temperatures, etc.)	0.13	0.13	0
South America	Incidents related to fall and ergonomics	0.34	0	0

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APPENDIX: DATA

GRI 404-1 AVERAGE HOURS OF TRAINING PER YEAR PER EMPLOYEE

AVERAGE HOURS OF EMPLOYEE TRAINING FY2018	SENIOR MANAGEMENT	MIDDLE MANAGEMENT	JUNIOR MANAGEMENT	NON- MANAGEMENT
Female	14	35	38	39
Male	24	44	51	34